09/770,634 Page 1 Krishnan

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=> d stat que

400) SEA FILE=HCAPLUS ALKYL(W) CELLULOSE? OR ALKYLCELLULOSE? L3 (

2896953 SEA FILE=HCAPLUS PREP/RL L5 48 SEA FILE=HCAPLUS L3 AND L5 L7

1 SEA FILE=HCAPLUS L7 AND (RADIAT? OR GAMMA(W) RAY?) L8

=> d ibib abs hitrn 18

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS 2001:17860 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

134:102446

TITLE:

Self-crosslinkable alkylcellulose

derivatives for biodegradable water absorbents and

their preparation by irradiation

INVENTOR(S):

Yoshii, Fumio; Kume, Tamikazu; Murakami, Tadashi Japan Atomic Energy Research Institute, Japan; Daicel

PATENT ASSIGNEE(S): Chemical Industries, Ltd.

SOURCE:

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

1.1

```
JP 1999-177517 19990623
                    A2 20010109
    JP 2001002703
    The derivs., useful for diapers, sanitary goods, etc., are prepd. by
AB
    irradn. of a mixt. contg. 100 parts C1-3-alkyl
    celluloses and 5-2000 parts water. The products (gels) have
    compression strength .gtoreq.100 g/cm2. Examples for manuf. of
    water-absorbing gels by .gamma.-ray irradn. of aq.
    solns. of CM-cellulose Na salt, carboxyethyl cellulose, hydroxypropyl
    cellulose, etc., were shown.
=> d stat que
           400) SEA FILE=HCAPLUS ALKYL(W) CELLULOSE? OR ALKYLCELLULOSE?
L3 (
       2896953 SEA FILE=HCAPLUS PREP/RL
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            48 SEA FILE=HCAPLUS L3 AND L5
L7
            1 SEA FILE=HCAPLUS L7 AND (RADIAT? OR GAMMA(W)RAY?)
L8
           399 SEA FILE=HCAPLUS L3 NOT L8
L10
             1 SEA FILE=HCAPLUS L10 AND SELF(W) (CROSS(W)LINK? OR CROSSLINK?)
T.11
=> d ibib abs hitrn 111
L11 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:575754 HCAPLUS
                       Self-cross-linking
TITLE:
                       alkyl cellulose derivative,
                       production process therefor, and use thereof
                       Yoshii, Fumio; Kume, Tamikazu; Murakami, Tadashi 🤫
INVENTOR(S):
                       Japan
PATENT ASSIGNEE(S):
                       U.S. Pat. Appl. Publ., 13 pp.
SOURCE:
                       CODEN: USXXCO
                       Patent
DOCUMENT TYPE:
                       English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE
                                       APPLICATION NO. DATE
                                        _____
     ______
    US 2002103160 A1 20020801 US 2001-770634 20010129
    A process for producing a self-cross-linking
AΒ
    alkyl cellulose derivative, which includes irradiating,
    with radioactive rays, a mixture of a starting alkyl
    cellulose derivative (the number of carbon atoms of the alkyl
    group is 1 through 3, the alkyl group may be substituted by a hydroxyl
    group or a carboxyl group, and the carboxyl group may form a salt) (100
    parts by weight) and water (5-2,000 parts by weight), and thus obtained
    self-cross-linking alkyl
    cellulose derivative has an improved biodegradability and
    excellent water-absorbability.
=> d stat que
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LLULOSE? OR CARBOXYALKYL(W) CELLULOSE?

175) SEA FILE=HCAPLUS CARBOXY(W) ALKYL(W) CELLULOSE? OR CARBOXYALKYLCE

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485) SEA FILE=HCAPLUS HYDROXY.(W) ALKYL(W) CELLULOSE? OR HYDROXYALKYL(W
L2
                ) CELLULOSE? OR HYDROXYALKYLCELLULOSE?
            400) SEA FILE=HCAPLUS ALKYL (W) CELLULOSE? OR ALKYLCELLULOSE?
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             70 SEA FILE=HCAPLUS (L1 OR L2) AND L3
L4
        2896953 SEA FILE=HCAPLUS PREP/RL
L5
             11 SEA FILE=HCAPLUS L4 AND L5
L6
             48 SEA FILE=HCAPLUS L3 AND L5
L7
             1 SEA FILE=HCAPLUS L7 AND (RADIAT? OR GAMMA(W) RAY?)
^{L8}
            399 SEA FILE=HCAPLUS L3 NOT L8
L10
             1 SEA FILE=HCAPLUS L10 AND SELF(W) (CROSS(W) LINK? OR CROSSLINK?)
L11
             11 SEA FILE=HCAPLUS L6 NOT (L8 OR L11)
L12
=> d ibib abs hitrn 112 1-11
L12 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2002 ACS
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1998:608428 HCAPLUS ACCESSION NUMBER:

129:232203 DOCUMENT NUMBER:

Manufacture of cellulose ethers containing 2-propenyl TITLE:

groups and their use as protective colloids in

polymerization of vinyl monomers

Donges, Reinhard; Ehrler, Rudolf; Wurm, Horst INVENTOR(S):

Clariant G.m.b.H., Germany PATENT ASSIGNEE(S): Eur. Pat. Appl., 14 pp. SOURCE:

CODEN: EPXXDW Patent DOCUMENT TYPE:

German LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PT,

AΒ H2O-sol., nonionic (hydroxy)alkyl cellulose derivs. with av. polymn. degree <900, substituted with 0.01-0.04 2-propenyl groups per anhydroglucose unit, are used for the title purpose. Such derivs. are more susceptible to radical grafting with vinyl monomers and more effective as protective colloids than the previous art cellulose derivs. A typical title ether was manufd. by etherification of Tylomer H 20 (hydroxyethyl cellulose with av. polymn. degree 220) with allyl glycidyl ether in Me3CHOH, in the presence of aq. NaOH.

L12 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS 1997:587709 HCAPLUS ACCESSION NUMBER:

Krishnan 09/770,634 Page 4

DOCUMENT NUMBER: 127:235912

TITLE: Manufacture of cellulose derivatives with sulfonic

acid groups

INVENTOR(S): Tanioka, Soji; Fukui, Ikuo; Onda, Yoshiro PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 09227601 A2 19970902 JP 1996-35881 19960223

OTHER SOURCE(S): MARPAT 127:235912

Cellulose-type substances are reacted with sulfonated conjugated dienes R1R2C:CR3CR4:CR5R6 (R1-R6 = SO3X, C1-8 alkyl, H; .gtoreq.1 of R1-R6 is SO3X; X = H, alkali metal, alk. earth metal, NH4) in the presence of alkalies. This process gives cellulose derivs. contg. SO3H at low cost. Thus, 20.8 g powd. linter pulp was dispersed in i-Pr alc., stirred in the presence of NaOH, reacted with 17.5 g 2-methyl-1,3-butanedienesulfonic acid sodium salt while refluxing, neutralized, washed, and dried to give a transparent sulfonated cellulose soln.

L12 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:833373 HCAPLUS

DOCUMENT NUMBER: 123:341335

TITLE: Preparation of styrene polymer beads

INVENTOR(S): Ono, Norihito; Sato, Masanobu PATENT ASSIGNEE(S): Sumitomo Chemical Co, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 07173205 A2 19950711 JP 1993-322153 19931221

Title beads with uniform size and sharp particle size distribution in repeated batches are prepd. by suspension polymn. of styrene monomers in aq. media with suspension stabilizers of alkyl cellulose or hydroxyalkyl cellulose, anionic surfactants, and gelatin in a polymn. vessel coated with naphthol (deriv.) sulfides. Thus, 125 parts styrene and 255 parts divinylstyrene contg. 44% ethylstyrene were suspension polymd. with 3.0 parts Metolose 90SH100 (hydroxypropyl Me cellulose), 2 parts Emal 2F Needle, and 0.45 part Gelatin R (gelatin) in an SUS 304 reactor coated with oligomeric 1-naphthol sulfide (obtained from 1-naphthol and S2Cl2) to give polymer beads with av. size 46 .mu.m and equiv. no. 3.2 for initial batch. These values did no change after 5 batches.

Krishnan 09/770,634 Page 5

L12 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:341021 HCAPLUS

DOCUMENT NUMBER: 122:114942

TITLE: controlled-release pharmaceuticals

INVENTOR(S): Ootsuka, Masaru; Myazawa, Yoshuki; Maruyama, Koichi

PATENT ASSIGNEE(S): Grelan Pharmaceutical Co, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 06316517 A2 19941115 JP 1994-44740 19940221

PRIORITY APPLN. INFO.: JP 1993-54676 19930222

AB Controlled-release pharmaceuticals consists of (A) slow-release tablets or granules contg. active ingredients (e.g. caffeine) 1-90, hydroxy lower alkyl cellulose 1-90, and bases 1-90 parts and (B) fast-release tablets or granules contg. active ingredients (caffeine) 1-90, hydroxy lower alkyl cellulose 1-90, and bases 1-90 parts. Both prepns. are incorporated into an administration unit to regulate the release rate.

L12 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:166877 HCAPLUS

DOCUMENT NUMBER: 120:166877

TITLE: Polymer-modified particulate titanium dioxide INVENTOR(S): Roulstone, Brian John; Waters, Julian Alfred

PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK

SOURCE: Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
EP	549163	A1	19930630	EP 1992-311057	19921203
EP	549163	B1	19940720		
	R: BE, DE	, ES, FR	, GB, IT,	LU, NL, SE	
ES	2056690	Т3	19941001	ES 1992-311057	19921203
AU	9229944	A1	19930624	AU 1992-29944	19921208
AU	648450	В2	19940421	•	
ZA	9209734	Α	19940426	ZA 1992-9734	19921215
CA	2085779	AA	19930624	CA 1992-2085779	19921218
CN	1074460	Α	19930721	CN 1992-115391	19921223
JP	05255609	A2	19931005	JP 1992-344465	19921224
US	5412019	Α	19950502	US 1994-189279	19940131
US	5534585	Α	19960709	US 1994-295103	19940824
PRIORIT	Y APPLN. INF	0.:		GB 1991-27293	19911223
				US 1992-995010	19921222

US 1994-189279 199401

The title particles comprise TiO2 with no.-av. diam. of 100-400 nm and org. polymer particles which can accommodate around the TiO2 particles and are preformed by free radical polymn. in the presence of TiO2-adsorbing group-contg. polymer-bondable and water-sol. compds. (A) or by polymn. followed by chem. bonding with A. Stirring 210-nm TiO2-contg. aq. dispersion with a latex (pH 8) contg. <225-nm vinyl particles contg. Natrosol 250 LR (hydroxyethyl cellulose) gave a stable dispersion which was dried at ambient temp. for 24 h to form a 200-.mu.m film with good sheen and coin mar resistance.

L12 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1993:23192 HCAPLUS

DOCUMENT NUMBER: 118:23192

TITLE: Preparation of vinyl-based polymer particles

INVENTOR(S): Matsuda, Kimiaki; Aoi, Masahiro PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04270702	A2	19920928	JP 1991-30702	19910226
TP 2964662	B2	19991018		

Title particles with uniform particle size, are prepd. by suspension polymn. of vinyl-based monomers in presence of (A) (hydroxy) alkylcellulose, (B) anionic surfactants, and (C) gelatins as suspension stabilizers. Thus, 200 parts styrene and 100 parts divinylbenzene (contg. 44% ethylstyrene) were suspension-polymd. in presence of Metolose 90SH100, Emal 2F Needle, Gelatin R (gelatin), tert-amyl alc., and lauroyl peroxide in H2O at 60-80.degree. for 8 h under N with stirring to give vinyl-based polymer particles with uniform particle size.

L12 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1987:479805 HCAPLUS

DOCUMENT NUMBER: 107:79805

TITLE: Anionic polysaccharide separation membranes

INVENTOR(S): Reineke, Charles Everett; Jagodzinski, James Anthony

PATENT ASSIGNEE(S): Dow Chemical Co., USA

SOURCE: Pat. Specif. (Aust.), 27 pp.

CODEN: ALXXAP

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AU 542434	В1	19850221	AU 1983-21882	19831201

L12 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS

selectivity (sepn. factor 877-2578).

ACCESSION NUMBER:

1984:511915 HCAPLUS

DOCUMENT NUMBER:

101:111915

TITLE:

Suspension polymerization for crosslinked polymer

having uniform granular diameters

was used for the sepn. of EtOH-H2O mixts. at 25.degree. with excellent

PATENT ASSIGNEE(S):

Asahi Chemical Industry Co., Ltd., Japan

SOURCE:

Jpn. Tokkyo Koho, 10 pp.

CODEN: JAXXAD

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59019123	В4	19840502	JP 1976-61283	19760528

AB Water-insol. phosphates, water-sol. alkylcellulose or hydroxyalkylcellulose, and anionic surfactants are used as suspending agents in suspension polymn. Thus, hydroxyapatite 0.5, methylcellulose (I) [9004-67-5] 0.25, and ammonium lauryl sulfate [2235-54-3] 0.1% were used as suspending agents to prep. divinylbenzene-4-vinylpyridine copolymer [9017-40-7] having granule size distribution as follows: on 200 mesh 9, on 250 mesh 22, on 280 mesh 44, on 300 mesh 17, on 400 mesh 7, and pass 400 mesh 1%, compared with on 120

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> mesh 14, on 150 mesh 46, on 200 mesh 22, on 280 mesh 11, and on 400 mesh 7%, for using 0.5% I as the suspending agent.

L12 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1980:182695 HCAPLUS

DOCUMENT NUMBER:

92:182695

TITLE:

Alkyl and hydroxyalkyl alkyl

cellulose

AUTHOR(S):

Greminger, George K., Jr.; Krumel, Karl L.

CORPORATE SOURCE:

Dow Chem. Co., Midland, MI, USA

SOURCE:

Handb. Water-Soluble Gums Resins (1980), 3/1-3/25. Editor(s): Davidson, Robert L. McGraw-Hill: New York,

N. Y.

CODEN: 43AIAV

DOCUMENT TYPE:

Conference; General Review

English

LANGUAGE:

A review with many refs. of the prepn., properties, and com. utilization of the title compds.

L12 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1978:546449 HCAPLUS

DOCUMENT NUMBER:

89:146449

TITLE:

Compact nitroguanidine Brachert, Heinrich

INVENTOR(S): PATENT ASSIGNEE(S):

Dynamit Nobel A.-G., Ger.

SOURCE:

Ger. Offen., 7 pp. CODEN: GWXXBX

Patent

DOCUMENT TYPE:

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2701994	A1	19780720	DE 1977-2701994	19770119
DF 2701994	C2	19860320		

A compact nitroguanidine of increased pouring d. was prepd. by recrystg. AB from aq. soln. in the presence of 1-5% alkyl celluloses or carboxyalkyl celluloses. Thus, nitroguanidine (pouring d. 0.3 g/mL) was added to aq. Tylose MH 50 at 80.degree. and the soln. temp. raised to 100.degree. and cooled to give nitroguanidine with a pouring d. of 0.84 g/mL. A pressed cylinder of high d. nitroguanidine 46 with NH4NO3 50 and polyvinylbutyral 4 wt.-parts did not pulverize on handling, whereas ordinary nitroguanidine gave a cylinder which partially pulverized almost immediately after being pressed.

L12 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1969:58403 HCAPLUS

DOCUMENT NUMBER:

70:58403

TITLE:

Suspension copolymerization of vinyl acetate with

crotonic acid

INVENTOR(S):

Sakato, Naoyuki; Koizumi, Jun

PATENT ASSIGNEE(S):

Shin-Etsu Chemical Industry Co., Ltd.

SOURCE:

Jpn. Tokkyo Koho, 3 pp.

Krishnan 09/770,634 Page 9

CODEN: JAXXAD

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

> 1 year.

. .

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 43027426 B4 19681126 JP 19641113

AB In the title process, dispersing agents such as hydroxyalkyl

cellulose and hydroxyalkylated alkyl cellulose

are used. Thus, a mixt. of vinyl acetate 98, crotonic acid 2, 0.05% aq.

hydroxypropyl Me cellulose [contg. 22% OMe and 6% OCH2CH(OH) Me groups]

200, and Bz202 1 part was polymd. 8 hrs. at 60-85.degree. to yield 95%

0.5-1 mm. bead copolymer, transparency of 5% MeOH soln. 97.2%, stable for

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            175) SEA FILE=HCAPLUS CARBOXY(W) ALKYL(W) CELLULOSE? OR CARBOXYALKYLCE
L1
   (
                LLULOSE? OR CARBOXYALKYL(W)CELLULOSE?
            485) SEA FILE=HCAPLUS HYDROXY(W) ALKYL(W) CELLULOSE? OR HYDROXYALKYL(W
L2
                ) CELLULOSE? OR HYDROXYALKYLCELLULOSE?
            400) SEA FILE=HCAPLUS ALKYL(W) CELLULOSE? OR ALKYLCELLULOSE?
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             70 SEA FILE=HCAPLUS (L1 OR L2) AND L3
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        2896953 SEA FILE=HCAPLUS PREP/RL
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             11 SEA FILE=HCAPLUS L4 AND L5
L6
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L7
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L8
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L11
            387 SEA FILE=HCAPLUS L10 NOT (L6 OR L8 OR L11)
L13
             3 SEA FILE=HCAPLUS L13 AND IRRAD?
L14
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=> d ibib abs hitrn 114 1-3

L14 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:131445 HCAPLUS

DOCUMENT NUMBER: 130:282691

TITLE: Structural study of a n-alkylthiophene polymer grown

in an oriented ultrathin matrix of

alkylcellulose

AUTHOR(S): Henry, C.; Armand, F.; Araspin, O.; Bourgoin, J.-P.;

Wegner, G.

CORPORATE SOURCE: CEA/DSM/DRECAM Service de Chimie Moleculaire, CE

Saclay, Gif-sur-Yvette, 91191, Fr.

SOURCE: Chemistry of Materials (1999), 11(4), 1024-1029

CODEN: CMATEX; ISSN: 0897-4756

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB A thin conducting film of an org. composite material based on Bu cellulose and polythiophene has been fabricated. Thin oriented films of Bu

09/770,634 Page 10 Krishnan

> cellulose cinnamate were deposited on a conducting substrate by the Langmuir-Blodgett technique and stabilized by crosslinking through UV irradn. Subsequent exposure to a soln. of 3-pentylthiophene followed by electropolymn. led to the formation of poly(3-pentylthiophene) (PPT) within the alkyl cellulose matrix. The structure of the composite material has been characterized by various spectroscopies, microscopies, and microanal. techniques. The composite material is made of domains of PPT oriented along the cellulose backbones. In the case of large domains (up to 35 .times. 150 .mu.m2) there is a segregation between cellulose and PPT. However, for small domains (a few square microns), the two polymers seem to be intimately mixed and PPT is oriented at the mol. level. In all cases, the alkyl cellulose stabilizes the PPT film in org. solvents and does not

worsen the PPT conducting properties.

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:26985 HCAPLUS

124:140153 DOCUMENT NUMBER:

Spectrochemistry of plasma-induced free radicals in TITLE:

cellulose derivatives

Kuzuya, Masayuki; Yamauchi, Yukinori; Niwa, Junji; AUTHOR(S):

Kondo, Shin-ichi; Sakai, Yoko

Lab. Pharmaceutical Phys. Chemistry, Gifu CORPORATE SOURCE: Pharmaceutical Univ., Gifu, 502, Japan SOURCE:

Chem. Pharm. Bull. (1995), 43(12), 2037-41

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal English LANGUAGE:

The authors report specific features of plasma-induced free radicals of AB cellulose derivs. such as Et cellulose (EC) and hydroxyethylcellulose (HEC) and a comparison with those of cellulose. The ESR spectra of Ar plasma-irradiated EC and HEC consist of 3 kinds of discrete spectral components, 2 isotropic spectra [doublets (I) and triplets (II), both being assigned to hydroxy alkyl radicals] and 1 anisotropic spectrum [doublet of doublets (IV) assigned to an acyl alkyl radical], and a single broad line spectrum (III). The special feature here is the fact that the spectrum (III) is a major component, contrary to cellulose, which was assigned to an immobilized dangling-bond site at the crosslinked region. The results suggest that plasma-induced crosslinking reactions are very predominant in EC and HEC relative to that of cellulose, due to the presence of alkyl substituents in EC and HEC.

L14 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS 1987:144029 HCAPLUS ACCESSION NUMBER:

106:144029 DOCUMENT NUMBER:

Adhesive tapes for mucous membranes or other skin TITLE:

surfaces

Takeshita, Kazuo INVENTOR(S):

Showa Yakuhin Kako Co., Ltd., Japan PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 4 pp. SOURCE:

CODEN: JKXXAF

Patent DOCUMENT TYPE:

Krishnan 09/770,634 Page 11

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61268260	A2	19861127	JP 1985-111106	19850523
JP 01037152	B4	19890804		

Adhesive tapes for mucous membranes or other skin surfaces contain polyacrylate Na and active ingredients with or without alkyl cellulose polyvinyl compds. The tapes are highly adhesive and resistant to saliva. Thus, a mixt. contg. 500 mg potency fradiomycin sulfate, 250 mg hydrocortisone acetate and polyacrylate Na (to 50 g) was spread on a silicone-treated stainless steel plate, treated with 70% EtOH, rolled, and dried at 80-85.degree. under IR irradn. for .apprx.5 min to produce an adhesive tape. The tape was cut to a size of 10 .times. 25 mm.

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show files
File 155:MEDLINE(R) 1966-2002/Aug W1
       5:Biosis Previews (R) 1969-2002/Aug W1
File
         (c) 2002 BIOSIS
File 31:World Surface Coatings Abs 1976-2002/Jul
         (c) 2002 Paint Research Assn.
File 53:FOODLINE(R): Food Science & Technology 1972-2002/Aug 12
         (c) 2002 LFRA
File 73:EMBASE 1974-2002/Aug W1
         (c) 2002 Elsevier Science B.V.
File 94:JICST-EPlus 1985-2002/Jun W3
         (c) 2002 Japan Science and Tech Corp(JST)
File 144: Pascal 1973-2002/Aug W2
         (c) 2002 INIST/CNRS
File 240: PAPERCHEM 1967-2002/Jul W3
         (c) 2002 IPST
File 342:Derwent Patents Citation Indx 1978-01/200210
         (c) 2002 Thomson Derwent
File 345:Inpadoc/Fam.& Legal Stat 1968-2002/UD=200231
         (c) 2002 EPO
File 347: JAPIO Oct 1976-2002/Apr(Updated 020805)
         (c) 2002 JPO & JAPIO
File 351:Derwent WPI 1963-2002/UD,UM &UP=200250
         (c) 2002 Thomson Derwent
File 357: Derwent Biotech Res. 1982-2002/June W1
         (c) 2002 Thomson Derwent & ISI
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 440: Current Contents Search(R) 1990-2002/Aug 13
         (c) 2002 Inst for Sci Info
?ds
Set
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                Description
                (ALKYL(W)CELLULOSE? OR ALKYLCELLULOSE?) AND (PREPAR? OR PR-
S1
             EP OR MANUF? OR PRODUC?) AND (IRRAD? OR RADIAT? OR GAMMA(W) RA-
             Y?)
           17
                RD (unique items)
S2
?t2/7/1-17
           (Item 1 from file: 347)
 2/7/1
DIALOG(R) File 347: JAPIO
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06775229
SELF-CROSSLINKED ALKYLCELLULOSE DERIVATIVE, AND ITS PRODUCTION
              2001-002703 [JP 2001002703 A]
PUB. NO.:
              January 09, 2001 (20010109)
PUBLISHED:
              YOSHII FUMIO
INVENTOR(s):
              KUME TAMIKAZU
              MURAKAMI TEI
APPLICANT(s): JAPAN ATOM ENERGY RES INST
              DAICEL CHEM IND LTD
APPL. NO.:
              11-177517 [JP 99177517]
              June 23, 1999 (19990623)
FILED:
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ABSTRACT

PROBLEM TO BE SOLVED: To obtain the subject derivative which has excellent biodegradability and further has excellent water absorbability, by irradiating a mixture comprising an alkylcellulose derivative and water with radiations.

SOLUTION: This method for producing a self-crosslinked alkylcellulose derivative comprises irradiating a mixture comprising (A) 100 pts.wt. of derivative as a raw material (the alkyl group has one alkylcellulose three carbon atoms and may be substituted by one or more hydroxyl groups, or the like) and (B) 5 to 2,000 pts.wt. of water with radiations . a carboxyalkylcellulose, preferably component Α is alkylcellulose or their mixture, which has at hydroxyalkylcellulose, an least one hydroxyl group or carboxyl group per glucose unit. 20% or more of the total amount of the hydroxyl groups and carboxyl groups of the component A is especially preferably their alkali metal salts, ammonium salts or amine salts.

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2/7/2 (Item 1 from file: 351)
DIALOG(R)File 351:Derwent WPI
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014516977 **Image available**

WPI Acc No: 2002-337680/200237

Cosmetic composition for releasing active agent, especially sunscreen, onto user's skin includes multiplicity of microcapsules having active agent deteriorating over time with exposure to radiation

Patent Assignee: INVENT RESOURCES INC (INVE-N)

Inventor: AISENBERG S; FREEDMAN G; HED A Z; PAVELLE R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6348218 B1 20020219 US 99411085 A 19991004 200237 B

Priority Applications (No Type Date): US 99411085 A 19991004

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6348218 B1 12 A61K-009/50

Abstract (Basic): US 6348218 B1

NOVELTY - A cosmetic composition comprises a medium to be spread onto the user's skin and a multiplicity of microcapsules dispersed in the medium. The microcapsules contain active agent(s) deteriorating over time with exposure to radiation. The release rate is controlled by providing the microcapsules with half-life times that deteriorate under ultraviolet radiation.

DETAILED DESCRIPTION - A cosmetic composition comprises a medium to be spread onto the user's skin and a multiplicity of microcapsules dispersed in the medium, where the microcapsules contain active agent(s). They have sufficient strength so that only minority of the microcapsules ruptures during application of the composition onto the user's skin. The release rate is controlled by providing a population of microcapsules with half-life times to deterioration under the influence of the ultraviolet (UV) radiation for one half-6 hours. The release rate is a function of exposure to UV radiation.

An INDEPENDENT CLAIM is also included for a method for releasing a sun blocking agent onto a user's skin over time by spreading a medium onto the skin of the user and exposing the skin to the UV radiation to cause the microcapsules to deteriorate over time to release the at least sun blocking agent(s) onto the skin.

USE - For releasing active agent onto a user's skin at a predetermined release rate.

ADVANTAGE - The encapsulating active ingredients for the skin

within capsules whose wall material deteriorates with exposure to the UV radiation provide a continuous mechanism for replenishing a film of UV absorbing agent or other active ingredients onto the skin.

DESCRIPTION OF DRAWING(S) — The figure is a side elevational view of microcapsules containing UV screening agents homogeneously distributed within a carrier film of a cosmetic preparation .

pp; 12 DwgNo 1/6
Derwent Class: A96; B07; D21

International Patent Class (Main): A61K-009/50

2/7/3 (Item 2 from file: 351)
DIALOG(R) File 351: Derwent WPI
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014417787

WPI Acc No: 2002-238490/200229

Detection of temperature excursions of articles, including perishable products such as vaccines, below threshold temperature, comprises using partially polymerized freeze indicator

Patent Assignee: PATEL G N (PATE-I)

Inventor: PATEL G N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20010046451 A1 20011129 US 99320358 A 19990526 200229 B
US 2001897240 A 20010702

Priority Applications (No Type Date): US 2001897240 A 20010702; US 99320358 A 19990526

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20010046451 A1 15 G01N-031/22 CIP of application US 99320358

Abstract (Basic): US 20010046451 A1

NOVELTY - Temperature excursions of articles, including perishable products such as vaccines, below a threshold temperature is detected by attaching a partially polymerized freeze indicator to the article. The freeze indicator comprises an activator system and an indicator. When the article is exposed to below the threshold temperature, the activator solvent induces a color change in the indicator.

DETAILED DESCRIPTION - Detection of temperature excursions of articles below a threshold temperature comprises preparing a freeze indicator comprising an activator system and an indicator, partially polymerizing the indicator at above the threshold temperature, and attaching the freeze indicator to the article.

The activator system comprises water and an activator solvent which is miscible in water above the threshold temperature and separates from water below the threshold temperature. The indicator irreversibly reacts with the activator solvent when separated from water. When the article is exposed to a temperature below the threshold temperature, the activator solvent separates from water and reacts with the indicator to cause a color change in the indicator.

INDEPENDENT CLAIMS are also included for:

- (A) a method of preparing a freeze indicator;
- (B) a device for detecting excursions below a threshold temperature; and
- (C) a gel formulation for detecting temperature excursions below a threshold temperature.

The method includes mixing an indicator with a solvent system and exposing the indicator to radiation at above the threshold

temperature to polymerize the indicator.

The device comprises compound of formula R1-C equivalent toC-Cequivalent toC-R2 and a solvent system. The gel formulation comprises water, a solvent miscible with water above the threshold temperature, a gelling agent, and a dispersion of partially polymerized diacetylene.

R1, R2=(CH2)b-H, (CH2)bOH, (CH2)b-OCONH-R1, (CH2)b-O-CO-R1, (CH2)b-OCONHCH2COO-R1, (CH2)b-COOH, (CH2)b-COOM, (CH2)b-NH2, (CH2)b-CONHR1, (CH2)b-CO-O-R1;

b=1-10;

R1=aliphatic or aromatic radical; and

M=cation e.g. Na+ or (R1)3N+.

USE - For detecting temperature excursions of articles, e.g. perishable products (such as vaccines, fresh produce, flowers, and latex paints) and emulsions (such as milk, fruit juices and yogurt) below a threshold temperature.

ADVANTAGE - The process utilizes a device that can be conformed to any shape.

pp; 15 DwgNo 0/7

Derwent Class: A89; B07; E19; G04; S03

International Patent Class (Main): G01N-031/22

2/7/4 (Item 3 from file: 351)
DIALOG(R)File 351:Derwent WPI
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014300593 **Image available**
WPI Acc No: 2002-121297/200216

Polymer for preparing anti-reflective compositions for use in the manufacture of microelectronic devices comprises hydroxyalkyl cellulose reacted with aryl isocyanate

Patent Assignee: BHAVE M R (BHAV-I); MEADOR J D (MEAD-I)

Inventor: BHAVE M R; MEADOR J D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20010031428 A1 20011018 US 9869573 A 19980429 200216 B
US 2000643695 A 20000822
US 2001798178 A 20010302

Priority Applications (No Type Date): US 2001798178 A 20010302; US 9869573 A 19980429; US 2000643695 A 20000822

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
US 20010031428 A1 7 G03F-007/30 Cont of application US 9869573
CIP of application US 2000643695

Abstract (Basic): US 20010031428 A1

NOVELTY - A polymer comprising hydroxyalkyl cellulose reacted with an aryl isocyanate is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (A) an anti-reflective composition for protecting a base material or holes formed in a base material, which includes the polymer dissolved in a solvent system;
- (B) the combination of a substrate and a cured protective layer comprising the composition on the substrate surface;
- (C) the formation of a precursor structure for use in manufacturing integrated circuits, which comprises applying an anti-reflective composition to the surface of the substrate; and
 - (D) the formation of a polymer useful in anti-reflective

5

compositions utilized in microlithographic processes. USE - The method is used for preparing anti-reflective compositions for use in the manufacture of microelectronic devices. ADVANTAGE - The invention provides improved anti-reflective coatings which can be effectively utilized to form integrated circuits having submicron features while absorbing light at the wavelength of interest. A protective layer from the composition can absorb at least 96% of light at wavelength of 193 nm. pp; 7 DwgNo 0/0 Derwent Class: A25; A85; G02; L03; P84; U11 International Patent Class (Main): G03F-007/30 (Item 4 from file: 351) 2/7/5 DIALOG(R) File 351: Derwent WPI (c) 2002 Thomson Derwent. All rts. reserv. 013819299 WPI Acc No: 2001-303511/200132 Manufacture of self crosslinked alkyl cellulose derivative used as soil conditioner in agriculture, is obtained by irradiating rays on mixture of alkyl cellulose derivative and water Patent Assignee: DAICEL CHEM IND LTD (DAIL); JAPAN ATOMIC ENERGY RES INST (JAAT) Number of Countries: 001 Number of Patents: 001 Patent Family: Applicat No Kind Date Week Date Patent No Kind JP 2001002703 A 20010109 JP 99177517 Α 19990623 200132 B Priority Applications (No Type Date): JP 99177517 A 19990623 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 2001002703 A 9 C08B-015/10 Abstract (Basic): JP 2001002703 A NOVELTY - Self-crosslinked alkyl cellulose derivative is obtained by irradiating gamma - rays on a mixture containing 100 weight parts (wt.pts) of 1-3C alkyl cellulose derivative as raw material and 5-2000 wt.pts of water. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for self-crosslinked alkyl cellulose derivative. USE - As a ground modifier in engineering works, soil conditioner in agriculture and horticultural field, water retention agent, coating agent, adhesive, poultice and soft ice cream. ADVANTAGE - Self-crosslinked type alkyl cellulose derivative is an excellent water absorbent and has self biodegrading ability. pp; 9 DwgNo 0/6 Derwent Class: A11; A82; A97; C04; D14; D22; F09; G02 International Patent Class (Main): C08B-015/10 International Patent Class (Additional): C08J-003/24; C08J-003/28; C08L-001-08; C09D-101/28; C09D-101/32; C09J-101/28; C09J-101/32 2/7/6 (Item 5 from file: 351) DIALOG(R) File 351: Derwent WPI (c) 2002 Thomson Derwent. All rts. reserv. 013816896 WPI Acc No: 2001-301108/200132 Negative-working heat-sensitive composition useful for making lithographic printing plate, has water-soluble binder containing

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dispersed particles of pigment and thermoplastic resin
Patent Assignee: KODAK POLYCHROME GRAPHICS CO LTD (EAST ); KODAK
  POLYCHROME GRAPHICS LLC (EAST )
Inventor: MONK A S; RAY K B; MONK A S V
Number of Countries: 002 Number of Patents: 002
Patent Family:
                                                            Week
             Kind
                     Date
                            Applicat No
                                            Kind
                                                   Date
Patent No
                            DE 1037455
                                                 20000801
                                                           200132 B
                                             Α
DE 10037455
              A1
                  20010315
                                                 19990802 200135
              B1 20010612 US 99365495
                                             Α
US 6245477
Priority Applications (No Type Date): US 99365495 A 19990802
Patent Details:
Patent No Kind Lan Pg
                        Main IPC
                                     Filing Notes
DE 10037455
             A1
                     6 G03F-007/12
                       G03C-001/72
US 6245477
             B1
Abstract (Basic): DE 10037455 A1
       NOVELTY - Negative-working heat-sensitive composition comprises a
    water-soluble binder and dispersed particles comprising a pigment
    combined with a thermoplastic resin. It can be applied to a substrate
    as a dry coating, which becomes less soluble in n aqueous developer on
    heating.
        DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
        (a) lithographic plate preforms;
        (b) printing plates produced from these.
       USE - The composition is used for and in a process for making
    lithographic printing plate precursors and plates (all claimed).
       ADVANTAGE - The composition is simple and can be developed with
    water or damping liquid and hence on-press. The coating can be applied
    from aqueous solution, avoiding the need to remove organic solvent.
        pp; 6 DwgNo 0/0
Derwent Class: A18; A97; G05; P75; P83; P84
International Patent Class (Main): G03C-001/72; G03F-007/12
International Patent Class (Additional): B41N-003/03; G03F-007/34
2/7/7
           (Item 6 from file: 351)
DIALOG(R) File 351: Derwent WPI
(c) 2002 Thomson Derwent. All rts. reserv.
013556898
WPI Acc No: 2001-041105/200105
  Pharmaceutical composition useful for stimulating epithelial cell
  proliferation and basal keratinocytes for wound healing comprises
  keratinocyte growth factor-2, in liquid or lyophilized forms
Patent Assignee: CHOPRA A (CHOP-I); GENTZ R L (GENT-I); HUMAN GENOME SCI
  INC (HUMA-N); KAUSHAL P (KAUS-I); KHAN F (KHAN-I); SPITZNAGEL T (SPIT-I);
  UNSWORTH E (UNSW-I)
Inventor: CHOPRA A; GENTZ R L; KAUSHAL P; KHAN F; SPITZNAGEL T; UNSWORTH E
Number of Countries: 094 Number of Patents: 003
Patent Family:
                            Applicat No
                                            Kind
                                                   Date
Patent No
             Kind
                     Date
                                                            Week
WO 200072872
              A1 20001207
                            WO 2000US15186 A
                                                 20000602
                                                          200105 B
                                                 20000602 200118
                   20001218
                            AU 200055932
                                             Α
AU 200055932
              A
              A1 20020417
                            EP 2000941186
                                             Α
                                                 20000602 200233
EP 1196187
                            WO 2000US15186 A
                                                 20000602
Priority Applications (No Type Date): US 99160913 P 19991022; US 99137448 P
  19990602
Patent Details:
Patent No Kind Lan Pg Main IPC
                                     Filing Notes
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WO 200072872 A1 E 101 A61K-038/18 Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW Based on patent WO 200072872 AU 200055932 A A61K-038/18 Based on patent WO 200072872 A61K-038/18 EP 1196187 A1 E Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200072872 A1

NOVELTY - Pharmaceutical composition (I) comprises:

- (1) 0.02-40 mg/ml (w/v) keratinocyte growth factor-2 (KGF-2) polypeptide;
 - (2) buffer having buffering capacity of pH 5-8 at 5-50 mM;
 - (3) a diluent to bring the composition to a designated volume; and
- (4) a preservative such as m-cresol, chlorobutanol, or a mixture of methyl paraben and propyl paraben or their reaction products .

ACTIVITY - Vulnerary; antiinflammatory; antipsoriatic; antidiabetic; ophthalmological; hemostatic. No biological data is given.

MECHANISM OF ACTION - Soft tissue growth or regeneration promoter; keratinocyte cell growth and proliferation stimulator.

- USE Used for promoting or accelerating soft tissue growth, for wound healing or treating mucocytis or inflammatory bowel disease. The KGF-2 polypeptides stimulate keratinocyte cell growth and proliferation and (I) is used to stimulate epithelial cell proliferation and basal keratinocytes for wound healing and to stimulate hair follicle production and healing of dermal wounds. These wounds may be of superficial nature or may be deep and involve damage of the dermis and the epidermis of skin. (I) Also promotes the healing of anastomotic and other wounds caused by surgical procedures in individuals which both heal wounds at a normal rate and are healing impaired. (I) may also be used to stimulate differentiation of cells, for example muscle cells, nervous tissue, prostate cells and lung cells.
- (I) Is clinically useful in stimulating wound healing of wounds including surgical wounds, excisional wounds, deep wounds involving damage of the dermis and epidermis, eye tissue wounds, dental tissue wounds, oral cavity wounds, diabetic ulcers, dermal ulcers, cubitus ulcers, arterial ulcers, venous stasis ulcers, and burns resulting from heat exposure to extreme temperatures of heat or cold, or exposure to chemicals. (I) is useful for promoting the healing of wounds associated with ischemia and ischemic injury, e.g. chronic venous leg ulcers caused by an impairment of venous circulatory system return and/or insufficiency etc. The KGF-2 polypeptides in the formulation are used to stimulate epithelial cell proliferation and basal keratinocytes for the purposes of treating burns and skin defects such as psoriasis and epidermolysis bullosa, to increase the adherence of skin grafts to a wound bed and to stimulate re-epithelialization from the wound bed to reduce the side effects of gut toxicity that result from radiation , chemotherapy treatments or viral infections and to treat diseases and conditions of the liver, lung, kidney.

KGF-2 can be used to treat inflammatory bowel diseases, diabetes, thrombocytopenia, hypofibrinogenemia, hypoalbuminemia, hemorrhagic cystitis, xerostomia, keratoconjunctivitis sicca. KGF-2 can also be used to stimulate the epithelial cells of the salivary glands, lacrimal glands and stimulating the epithelial cells of the salivary glands, lacrimal glands and stimulating re-epithelialization of the sinuses and the growth of nasal mucosa.

ADVANTAGE - The composition is stable over prolonged periods of storage, has increased pharmacological activity or effectiveness of the polypeptide and/or allow facile application or administration of the polypeptide in therapeutic regimens.

pp; 101 DwgNo 0/5 Derwent Class: A96; B04

International Patent Class (Main): A61K-038/18

International Patent Class (Additional): A61K-038/17

2/7/8 (Item 7 from file: 351) DIALOG(R) File 351: Derwent WPI

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013550068

WPI Acc No: 2001-034274/200105

Cholestric macromolecular liquid crystal-formable compositions useful for

image display and coloration

Patent Assignee: DAINICHISEIKA COLOR & CHEM MFG CO LTD (DAIC) Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 2000226581 A 20000815 JP 9926633 A 19990203 200105 B

Priority Applications (No Type Date): JP 9926633 A 19990203

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2000226581 A 9 C09K-019/38

Abstract (Basic): JP 2000226581 A

NOVELTY - An energy-curing cholesteric macromolecular liquid crystal-formable composition comprises letting a cholesteric macromolecular liquid crystal-formable compound consisting mainly of an acyl derivative of hydroxyalkylcellulose contain an energy-curing compound.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for a manufacturing method for cholesteric macromolecular liquid crystals using the energy-curing cholesteric macromolecular liquid crystal-formable compositions and cholesteric macromolecular liquid crystals.

USE - The cholesteric macromolecular liquid crystals are useful for display of images, patterns and characters totally or partly colored and thus for information recording materials, information display materials, forgery-proof materials for bank notes, securities, visas and various cards, coupons and tickets, ornamental materials, artificial gems, advertisements, sign boards, doors, windows, show windows, coating materials, paint especially for design ones and moldings.

ADVANTAGE - The cholesteric macromolecular liquid crystals can be prepared from easily and economically available materials, can control and fix the pitch of the helical structure facilely and effectively and can develop a highly clear predetermined color.

pp; 9 DwgNo 0/2

Derwent Class: All; A82; A85; E19; G02; L03; P81 International Patent Class (Main): C09K-019/38

International Patent Class (Additional): G02F-001/13; G02F-001/1333

2/7/9 (Item 8 from file: 351)
DIALOG(R)File 351:Derwent WPI

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013415668
WPI Acc No: 2000-587606/200055
  Topical composition with a pH greater than 3.5, for treating aging or
  damaged skin, comprises ascorbic acid, non-toxic zinc salt, tyrosine
  compound and water
Patent Assignee: BIODERM INC (BIOD-N); MEISNER L F (MEIS-I)
Inventor: MEISNER L F
Number of Countries: 092 Number of Patents: 008
Patent Family:
                                                             Week
                                                   Date
                                            Kind
Patent No
              Kind
                     Date
                             Applicat No
                                                           200055
                                                 20000316
                   20000928
                             WO 2000US6886
                                             Α
WO 200056327
               A1
                                                 20000316
                                                           200103
                             AU 200040114
                                             Α
AU 200040114
                   20001009
               А
                                                  19990319
                                                           200123
                                             Ρ
                   20010417
                             US 99125356
               B1
US 6217914
                                                  19990719
                             US 99356142
                                             Α
                                                  19990319
                                                            200172
US 20010041193 A1
                              US 99125356
                                              Ρ
                    20011115
                             US 99356142
                                             Α
                                                  19990719
                                                  20001207
                             US 2000732385
                                             Α
                                                  20000316
                                                           200206
                   20011226
                             BR 20009158
                                             Α
BR 200009158
               Α
                                                  20000316
                             WO 2000US6886
                                             Α
                                                            200222
                                              Ρ
                                                  19990319
                    20020314
                              US 99125356
US 20020031557
               Α1
                             US 99356142
                                                  19990719
                                             Α
                             US 2000732385
                                                  20001207
                                             Α
                             US 2001990611
                                             Α
                                                  20011121
                                              Р
                                                  19990319 200225
                    20020328
                              US 99125356
US 20020037314 A1
                                                  19990719
                             US 99356142
                                             Α
                             US 2000732385
                                             Α
                                                  20001207
                             US 2001997663
                                             Α
                                                  20011129
                                                            200225
                   20020313
                             EP 2000919421
                                             Α
                                                  20000316
EP 1185260
               A1
                                                  20000316
                             WO 2000US6886
                                             Α
Priority Applications (No Type Date): US 99356142 A 19990719; US 99125356 P
  19990319; US 2000732385 A 20001207; US 2001990611 A 20011121; US
  2001997663 A 20011129
Patent Details:
                                      Filing Notes
Patent No Kind Lan Pg
                         Main IPC
WO 200056327 A1 E 22 A61K-031/195
   Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
   CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
   KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD
   SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
                       A61K-031/195 Based on patent WO 200056327
AU 200040114 A
                       A61K-031/19
                                      Provisional application US 99125356
US 6217914
              В1
                                       Provisional application US 99125356
                        A61K-033/32
US 20010041193 A1
                                      Cont of application US 99356142
                                      Cont of patent US 6217914
                                      Based on patent WO 200056327
BR 200009158 A
                       A61K-031/195
                                       Provisional application US 99125356
                        A61K-033/32
US 20020031557 A1
                                      Cont of application US 99356142
                                      Cont of application US 2000732385
                                      Cont of patent US 6217914
                                       Provisional application US 99125356
                        A61K-033/30
US 20020037314 A1
                                      Cont of application US 99356142
                                      CIP of application US 2000732385
                                      Cont of patent US 6217914
                                      Based on patent WO 200056327
                       A61K-031/195
EP 1185260
              A1 E
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LT LT LU LV MC MK NL PT RO SE SI Abstract (Basic): WO 200056327 A1 NOVELTY - Topical composition (I) with a pH of more than 3.5 comprises at least 5.0% (w/v) ascorbic acid, water, a non-toxic zinc salt and a tyrosine compound. ACTIVITY - Dermatological; antiinflammatory; antioxidant. MECHANISM OF ACTION - None given. USE - To protect and treat skin from damage due to exposure to radiation or chemicals, especially ultraviolet radiation (claimed), and to inhibit the effects of aging e.g. wrinkles. pp; 22 DwgNo 0/0 Derwent Class: A96; B03; D21 International Patent Class (Main): A61K-031/19; A61K-031/195; A61K-033/30; A61K-033/32 International Patent Class (Additional): A61K-007/06; A61K-009/70; A61K-031/198; A61K-031/21; A61K-031/22; A61K-031/235; A61K-031/315; A61K-031/34; A61K-031/375; A61K-031/66; A61K-031/7008; A61K-033/04 2/7/10 (Item 9 from file: 351) DIALOG(R) File 351: Derwent WPI (c) 2002 Thomson Derwent. All rts. reserv. 013099359 WPI Acc No: 2000-271231/200023 Highly concentrated ascorbic acid compositions useful for improving skin appearance contain polyhydric alcohol, organic carbonate and minimal water Patent Assignee: AVON PROD INC (AVON) Inventor: COWTON L M; DUFFY J A; DUGGAN M C Number of Countries: 087 Number of Patents: 005 Patent Family: Week Patent No Date Applicat No Kind Date Kind A1 20000323 WO 99US19793 A. 19990830 200023 B WO 200015221 20000403 AU 9957923 19990830 200034 AU 9957923 A Α A 19990830 A1 20000913 EP 99945302 200046 EP 1033985 WO 99US19793 Α 19990830 20011009 US 98150806 Α 19980910 200162 US 6299889 В1 MX 2000004476 A1 20001101 MX 20004476 Α 20000509 200163 Priority Applications (No Type Date): US 98150806 A 19980910 Patent Details: Main IPC Patent No Kind Lan Pg Filing Notes WO 200015221 A1 E 27 A61K-031/375 Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW A61K-031/375 Based on patent WO 200015221 AU 9957923 Α A1 E EP 1033985 A61K-031/375 Based on patent WO 200015221 Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE A61K-006/00 US 6299889 В1

Abstract (Basic): WO 200015221 A1

MX 2000004476 A1

NOVELTY - Compositions comprising polyhydric alcohol, organic

A61K-031/375

11

carbonate, high concentrations of ascorbic acid and minimal water, useful for improving skin appearance, are new.

DETAILED DESCRIPTION - A composition comprising ascorbic acid, polyhydric alcohol, organic carbonate and water is new.

INDEPENDENT CLAIMS are included for:

- (A) a process for preparing a stable homogenous ascorbic acid composition comprising (1) the preparation of a mixture comprised of ascorbic acid, polyhydric alcohol, organic carbonate and water, and (2) filtering the mixture to remove insoluble particles; and
- (B) a method for improving skin appearance comprising (1) topically applying the composition prepared in (A) above and (2) applying a moisturizer to the same area of skin.

ACTIVITY - Cosmetic; anti-wrinkle; collagen synthesis adjuvant; ultraviolet dermal protector.

MECHANISM OF ACTION - Lipid metabolism antioxidant; age-related melanin formation inhibitor.

USE - Useful as a cosmetic for improving skin appearance, reducing the occurrence of wrinkles, preventing aging-related melanin formation and preventing ultraviolet radiation damage to skin.

ADVANTAGE - The composition is water-soluble and has long-term stability. It allows an efficacious concentration of ascorbic acid to be absorbed following topical application to the skin.

pp; 27 DwgNo 0/0

Derwent Class: A96; B03; D21

International Patent Class (Main): A61K-006/00; A61K-031/375

International Patent Class (Additional): A61K-031/34

2/7/11 (Item 10 from file: 351)

DIALOG(R) File 351: Derwent WPI

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012923714 **Image available**
WPI Acc No: 2000-095550/200008

Non-woven cellulosic fiber web used in variety of packaging formats to pack variety of items

Patent Assignee: CELLRESIN TECHNOLOGIES LLC (CELL-N)

Inventor: BEAVERSON N J; WOOD W E

Number of Countries: 028 Number of Patents: 008

Patent Family:

_ ~ .		•							
Pat	tent No	Kind	Date	App	plicat No	Kind	Date	Week	
US	5985772	Α	19991116	US	94264771	Α	19940623	200008	В
				US	96603337	Α	19960220		
				US	98111263	Α	19980706		
WO	200001527	A 1	20000113	WO	99US8017	Α	19990413	200011	
ΕP	1094940	A1	20010502	EP	99917438	Α	19990413	200125	
				WO	99US8017	A	19990413		
BR	9912515	Α	20010502	BR	9912515	Α	19990413	200129	
				WO	99US8017	Α	19990413		
CN	1308577	Α	20010815	CN	99808239	Α	19990413	200174	
KR	2001071769	Α	20010731	KR	2001700236	Α	20010106	200208	
TW	446785	Α	20010721	TW	99110344	Α	19990621	200219	
JР	2002519221	W	20020702	WO	99US8017	Α	19990413	200246	
				JP	2000557954	A	19990413		

Priority Applications (No Type Date): US 98111263 A 19980706; US 94264771 A 19940623; US 96603337 A 19960220

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5985772 A 23 B32B-027/06 CIP of application US 94264771 CIP of application US 96603337

CIP of patent US 5492947 CIP of patent US 5776842

WO 200001527 A1 E B32B-023/08 Designated States (National): BR CA CN JP KR MX SG Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE Based on patent WO 200001527 EP 1094940 A1 E B32B-023/08 Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI NL BR 9912515 B32B-023/08 Based on patent WO 200001527 Α B32B-023/08 CN 1308577 Α KR 2001071769 A D21H-019/84 D21H-019/84 TW 446785 A JP 2002519221 W 64 B32B-023/08 Based on patent WO 200001527

Abstract (Basic): US 5985772 A

NOVELTY - The web comprises structural, barrier and clay layers. The structural layer comprises a continuous array of randomly oriented cellulosic fiber at product and exterior side. The barrier

layer comprises diluent and a cyclodextrin compound which acts as barrier to the passage of permeant in the ambient environment or as a trap of contaminant and is free of complex compounds

USE - The cellulosic web containing cyclodextrin or compatible derived cyclodextrin is used in variety of packaging

formats to pack a variety of items, such as pouches and bags. The cellulosic web is used as a means of paper closure on rigid plastic containers which can be rectangular, circular, square or possessing other shaped cross-sections with a flat bottom and open top. The cellulosic web coated on the container is used for blister pack packaging, clamp shell type enclosures, tubs, and trays. The cellulosic web is also used for packaging coffee, ready to eat cereal, crackers, pasta, cookies, frozen pizza, candy, cocoa or other chocolate products, dry mix gravies, soup, snack foods such as chips, crackers and popcorn, baked foods, pastries, breads, dry pet food such as cat food, butter or butter-flavoured notes which can be used in microwave popcorn manufacture in paper containers, meat products, fruit

manufacture in paper containers, meat products, fruit and nuts. The cellulosic web including paper boards and corrugated paper boards is used in various types of packages.

Corrugated medium bleached or unbleached paper board is used for folded packaging of corrugated container boxes and folding cartons. The flexible containers are used for bags, sacks, pouches, wrappers and labeled items made from paper laminates comprising web film or foil clay coated paper laminate, thermoplastic paper laminate or multilayer paper laminate.

ADVANTAGE - The non-cellulosic fiber web has improved barrier trap properties in the presence of permeant and contaminant. The barrier paper board material reduces the passage of permeant material from the ambient atmosphere. Mobile or volatile organic contaminant from the environment present within the paper board or from any contaminant in recycled material can be trapped by the active barrier material. The barrier coating resists the passage of water, water vapor, oxygen, carbon dioxide, hydrogen sulfide, solvent, grease, flat, oil, odor, recycled contaminants and other chemicals present during paper board manufacture. The paper board containing barrier layer acts as a barrier to the passage of contaminant and as a trap for contaminant that can raise new materials.

DESCRIPTION OF DRAWING(S) - The figure shows a cross-sectional view of the cellulosic web.

Printed layer (220) Clay layer (230)

```
Paper board (240)
        Diluent layer. (250)
        pp; 23 DwgNo 4/4
Derwent Class: A18; A23; A92; D13; F09; G02; P73
International Patent Class (Main): B32B-023/08; B32B-027/06; D21H-019/84
International Patent Class (Additional): B32B-027/10; B32B-027/32
 2/7/12
            (Item 11 from file: 351)
DIALOG(R) File 351: Derwent WPI
(c) 2002 Thomson Derwent. All rts. reserv.
012437466
WPI Acc No: 1999-243574/199920
  Novel encapsulated electrophoretic displays and their preparation
Patent Assignee: E-INK CORP (EINK-N)
Inventor: ALBERT J D; CAMISKEY B; DRZAIC P; FEENEY R; JACOBSON J M; LOXLEY
  A; MORRISON I; ZHANG L; COMISKEY B
Number of Countries: 082 Number of Patents: 004
Patent Family:
                     Date
                             Applicat No
                                            Kind
                                                   Date
                                                            Week
Patent No
              Kind
WO 9910767
              A1 19990304
                            WO 98US17734
                                             Α
                                                 19980827
                                                           199920
AU 9892063
              Α
                   19990316 AU 9892063
                                             Α
                                                 19980827
                                                           199930
              A1 20000621
                                                 19980827
                                                           200033
EP 1010036
                            EP 98944544
                                             Α
                             WO 98US17734
                                             Α
                                                 19980827
                   20001003 BR 9814456
                                             Α
                                                 19980827
                                                           200053
BR 9814456
              Α
                                             Α
                             WO 98US17734
                                                 19980827
Priority Applications (No Type Date): US 9876978 P 19980305; US 9757118 P
  19970828; US 9757122 P 19970828; US 9757133 P 19970828; US 9757163 P
  19970828; US 9757716 P 19970828; US 9757798 P 19970828; US 9757799 P
  19970828; US 9759358 P 19970919; US 9759543 P 19970919; US 97935800 A
  19970923; US 9765605 P 19971118; US 9765629 P 19971118; US 9765630 P
  19971118; US 9766147 P 19971119; US 9766245 P 19971120; US 9766246 P
  19971120; US 9766115 P 19971121; US 9766334 P 19971121; US 9766418 P
  19971124; US 9870935 P 19980109; US 9870939 P 19980109; US 9870940 P
  19980109; US 9872390 P 19980109; US 9871371 P 19980115; US 9874454 P
  19980212; US 9876955 P 19980305; US 9876956 P 19980305; US 9876957 P
  19980305; US 9876959 P 19980305; US 9876933 P 19980305
Patent Details:
Patent No Kind Lan Pg
                         Main IPC
                                     Filing Notes
             A1 E 69 G02F-001/167
WO 9910767
   Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU
   CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR
   LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
   TR TT UA UG UZ VN YU ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
                                     Based on patent WO 9910767
AU 9892063
              Α
                                    Based on patent WO 9910767
                       G02F-001/167
EP 1010036
              Al E
   Designated States (Regional): CH DE FR GB IT LI NL
                       G02F-001/167 Based on patent WO 9910767
BR 9814456
Abstract (Basic): WO 9910767 A1
        NOVELTY - The display comprising: anisotropic particles dispersed
    in a suspending fluid; and second particles, the anisotropic particles
    ordering into an optically transparent state upon application of a
    first electric field and the second particles translating to disorder
    the anisotropic microparticles into an optically scattering or
    absorbing state upon applying a second electric field.
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DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the

following:

- (A) A multi-color, encapsulated electrophoretic display comprising at least 3 species of particles, each having substantially non-overlapping electrophoretic mobilities. The multi-color display predominantly displays one of the species of particles in response to a sequence of electrical pulses controlled in both time and amplitude;
- (B) Creation of an encapsulated electrophoretic display, comprising:
- (a) encapsulating a dye in a suspending fluid into first capsules;
- (b) encapsulating the first capsules into a second capsule in a binder;
 - (c) Providing a binder;
 - (d) curing the binder; and
- (e) applying a mechanical force to the binder; whereby application of the force causes the binder to form capsule(s) in a non - spherical shape.

USE - None given.

ADVANTAGE - The displays are printable, flexible, easy and inexpensive to manufacture , have good long-term image quality and consume little or no power. The degree of bistability of the display can be controlled through appropriate chemical modification of the electrophoretic particles, suspending fluid, capsule and binder materials.

pp; 69 DwgNo 0/13

Derwent Class: A89; E21; E22; E23; E24; L03; P81; U14 International Patent Class (Main): G02F-001/167

2/7/13 (Item 12 from file: 351)

DIALOG(R) File 351: Derwent WPI

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012115857

WPI Acc No: 1998-532769/199846

Liquid crystal ester compounds for special-effect paint - comprise mixed ester(s) derived from hydroxyalkyl - cellulose ether and a mixture of saturated carboxylic acid and unsaturated mono or dicarboxylic acid

Patent Assignee: BASF AG (BADI)

Inventor: KELLER H; MAXEIN G; MUELLER M; ZENTEL R Number of Countries: 022 Number of Patents: 002

Patent Family:

Applicat No Kind Patent No Kind Date Date DE 19713638 19970402 199846 B Al 19981008 DE 1013638 Α A1 19981008 WO 98EP1893 Α 19980401 WO 9844073

Priority Applications (No Type Date): DE 1013638 A 19970402

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

A1 5 C08B-013/00 DE 19713638

Al G C09K - 019/38

Designated States (National): CN JP KR US

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Abstract (Basic): DE 19713638 A

Liquid crystal (LC) or cholesteric mixed esters (I) derived from (a) hydroxyalkyl ethers of cellulose with (b) saturated aliphatic or aromatic carboxylic acids and (c) unsaturated mono- or di-carboxylic acids are new.

Also claimed are (i) LC or cholesteric polymers (LCP) obtained by

radiation -hardening of (I), (ii) pigments containing LCP, (iii) coating materials, especially paints, containing (I) or LCP-containing pigments, (iv) a process for the production of (I) by reacting a mixture of the acid chlorides of (b) and (c) with component (a), and (v) a process for the production of pigments by pulverising LCP under mild thermal conditions, especially in an air-jet mill.

USE - Esters (I) or polymers (LCP) or LCP-containing pigments are used for the production of optical components or as coating materials, and esters (I) are used as colouring agents, especially as colour components of paint systems for coating surfaces or as components of printing ink (claimed). Applications include painting or coating cars, motorbikes, packaging, labels and ornamental articles.

ADVANTAGE - Esters (I) are one-component systems with better handling properties than esters of (a) and (c) alone (particularly with regard to spontaneous crosslinking), which act as thermotropic systems without the aid of solvents. This enables the economical production of LCP with good storage stability and with a precisely adjustable and uniform colour which can be permanently fixed to give a particularly impressive colour effect.

Dwg.0/0

Derwent Class: A11; A14; A82; A89; G02; L03
International Patent Class (Main): C08B-013/00; C09K-019/38
International Patent Class (Additional): C08J-003/28; C09B-067/20; C09D-005/36; C09D-011/02; C09D-017/00; C09K-019/00

2/7/14 (Item 13 from file: 351)
DIALOG(R)File 351:Derwent WPI
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012004958

WPI Acc No: 1998-421868/199836

Ablation recording material - comprises a substrate with a colour material layer on one side and contains the nitrate of

carboxyalkylcellulose

Patent Assignee: FUJI PHOTO FILM CO LTD (FUJF)
Inventor: ISHIHARA M; ITO T; OBAYASHI T; WATANABE K
Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
JP 10175372 A 19980630 JP 96338724 A 19961218 199836 B
US 6261739 B1 20010717 US 97924660 A 19970905 200142

Priority Applications (No Type Date): JP 96338724 A 19961218; JP 96240170 A 19960911; JP 96240171 A 19960911

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 10175372 A 14 B41M-005/26

US 6261739 B1 B41M-005/26

Abstract (Basic): JP 10175372 A

An ablation recording material to be heated imagewise by irradiating it with laser rays comprises a substrate provided with at least one colour material layer on the one side and contains the nitrate of carboxyalkylcellulose having the substitution degree of nitrate group of 0.2-2.8 per anhydrous glucose unit in at least one layer in the colour material layer side. Irradiation is carried out from the colour material layer side.

 $\mbox{USE}-\mbox{As}$ an ablation recording material which has low Dmin in irradiated parts with laser rays and also, can be prepared by the use of binder easy to handle.

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ADVANTAGE - The ablation recording material has matte effects if it
    is provided with an over coat layer on the colour material layer.
       Dwq.0/0
Derwent Class: A11; A89; G05; G06; L03; P75
International Patent Class (Main): B41M-005/26
International Patent Class (Additional): C08B-005/02; C09K-003/00
            (Item 14 from file: 351)
2/7/15
DIALOG(R) File 351: Derwent WPI
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007869652
WPI Acc No: 1989-134764/198918
  Cheese of good thermal resistance - contg. cellulose ether, water soluble
  alginate and e.g. calcium chloride
Patent Assignee: FUJI OIL CO LTD (FUKO ); SHIN-ETSU CHEMICAL CO (SHIE )
Number of Countries: 002 Number of Patents: 003
Patent Family:
                             Applicat No
                                            Kind
                                                   Date
                                                            Week
Patent No
              Kind
                    Date
                                                           198918 B
                             JP 87235448
                                             Α
                                                 19870918
JP 1080252
                  19890327
              Α
                  19910305 US 88268545
                                             Α
                                                 19881107
                                                           199112 N
US 4997669
              Α
              B2 19940601 JP 87235448
                                                 19870918
                                                          199420
JP 94040798
                                             Α
Priority Applications (No Type Date): JP 87235448 A 19870918; US 88268545 A
  19881107
Patent Details:
                        Main IPC
                                     Filing Notes
Patent No Kind Lan Pg
JP 1080252
             Α
                       A23C-019/086 Based on patent JP 1080252
JP 94040798
Abstract (Basic): JP 1080252 A
       A new sort of cheeses can be prepd. by addn. of cellulose either
    with 26-33% of methoxy radicals, water soluble alginate and Ca salt
    e.g. CaCl2 or the like into a material mixt. for common cheeses.
       USE - Good thermal resistance esp. for microwave irradiation of
    cheeses can be attained.
       0/0
Abstract (Equivalent): US 4997669 A
        Dehydrated cheese is produced by (a) admixing cheese, water and
    cellulose ether in amt. 0.5-6 wt.% w.r.t. solid matter of cheese to
    form a water-contg. paste; (b) shaping the paste; and (c) drying while
    maintaining its shape so that water content is 10 wt.% or less.
        Cellulose ether has methoxy gp. content 26-33 wt.% and comprises
   methyl cellulose and/or hydroxyalkylmethyl
                                                 cellulose . Opt. cheese
    includes a water-soluble alginate and Ca-salt.
       ADVANTAGE - Has improved shape retention against microwave
    irradiation heating. (6pp)
Derwent Class: D13
International Patent Class (Main): A23C-019/086
International Patent Class (Additional): A23C-019/08; A23C-019/093;
  A23L-001/05
 2/7/16
            (Item 15 from file: 351)
DIALOG(R) File 351: Derwent WPI
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003485113
WPI Acc No: 1982-33075E/198216
  Film able to adhere to mucous membrane - consists of water-soluble high
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polymer film contg. drug and with one side made resistant to water soln. Patent Assignee: KIZAWA H (KIZA-I); NIPPON SODA CO (NIPS) Inventor: FUJIYAMA N; ITO A; KOBAYASHI J Number of Countries: 008 Number of Patents: 005 Patent Family: Patent No Kind Date Applicat No Kind Date Week WO 8201129 19820415 198216 B Α 19820408 JP 80133947 19800926 198220 JP 57058615 Α EP 63604 Α 19821103 198245 19820525 198522 US 4517173 Α 19850514 US 82385647 JP 88018923 В 19880420 198819 Priority Applications (No Type Date): JP 80133947 A 19800926 Cited Patents: JP 50105814; JP 55062012; JP 56020514; JP 56036413 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes WO 8201129 A J 22 Designated States (National): AT US Designated States (Regional): CH DE FR GB NL

Abstract (Basic): WO 8201129 A

Designated States (Regional): CH DE FR GB NL

Water soluble high polymer film contg. a drug and with one side made resistant to solution in water maintains good adhesion to mucous membrane e.g. in the mouth, etc. The drug is suitably a slow release agent, e.g. prednisolone or allantoin. The water soluble high polymer is, e.g., hydroxy propyl cellulose (HPC), methyl cellulose, hydroxy propyl alkyl cellulose, carboxy methyl cellulose, polyacrylic acid or a sodium, potassium or ammonium salt thereof, an acrylic acid copolymer with styrene or methacrylic acid, polyvinyl alcohol, polyvinyl alcohol, polyvinyl pyrrolidine, or polyalkylene glycol. Water solution resistance is imparted to one side of the high polymer film by radiation or infrared ray treatment to cause local crosslinking, or by treatment with an agent, e.g., shellac, stearic acid, palmitic acid or similar higher fatty acid, or cellulose such as ethyl cellulose or cellulose acetate. Pref., a 1st soln. contg. the drug and the water soluble high polymer and a 2nd soln. contg. a water solution resistance agent and the water soluble high polymer are separately ppd., e.g., using water or ethanol as solvent, a film of one soln. is coated on a substrate with good release qualities, e.g. Teflon (RTM) or glass, then this film is coated with the other soln. and the solvent is removed, e.g. by heating at normal press. or under vacuum. Suitable wt.ratios in the 2nd soln. are HPC: shellac= 9:1-1:9; HPC: higher fatty acid= 9:1-7:3. An intermediate layer, e.g. HPC and Macrogall 400 dissolved in ethyl alcohol, may be provided between the 1st and 2nd soln. layers. (22pp)

Abstract (Equivalent): US 4517173 A

Film adhering to mucous membranes consists of at least 3 layers a) a pharmaceutical layer consisting of predonisolone and allantoin together with a water soluble OH-propyl cellulose, Me cellulose and/or OH-propyl Me cellulose as a thin film base, b) in intermediate layer consisting of a water soluble cellulose and free from pharmaceutical agents and free from sparingly water soluble cpds. and c) a sparingly water soluble layer consisting of a water soluble cellulose and sparingly water soluble shellac and/or higher fatty acids. The film has a flat surface to be applied to the mouth cavity and to adhere to a mucous membrane.

The water soluble cellulose derivs. are selected to have superior film mouldability to produce a soft flexible film and the cellulose derivs. gradually discharge the effective components in the mouth.

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18
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USE/ADVANTAGE - As a more effective and comfortable way of applying
   medicaments to ulcerated or inflamed parts of mucous membranes. (7pp
Derwent Class: A96; B04; B07; P32; P34
International Patent Class (Additional): A61F-013/00; A61K-009/70;
 A61L-015/03
            (Item 16 from file: 351)
 2/7/17
DIALOG(R) File 351: Derwent WPI
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001594567
WPI Acc No: 1976-28968X/197616
  Polyester under-coating compsn - contg hydroxy- alkyl
                                                          cellulose,
  gelatin, resorcinol, olefinic and epoxy organics
Patent Assignee: MITSUBISHI PAPER MILLS LTD (MITY )
Number of Countries: 001 Number of Patents: 002
Patent Family:
              Kind
                     Date
                             Applicat No
                                            Kind
                                                   Date
                                                            Week
Patent No
                                                           197616 B
JP 51025571
              Α
                   19760302
                                                           198207
                   19820123
JP 82003930
               R
Priority Applications (No Type Date): JP 7498565 A 19740828
Abstract (Basic): JP 51025571 A
       A compsn. comprises a liquid contg. a hydroxy- alkyl
                                                               cellulose
    of the formula I (R: -(CH2-CH2-O)-mH or -(CH2-CH-O)-mH; n, m: integer
    1), gelatin and resorcinol (at mixing ratio of 0.1-2:1:2-20 by wt.) and
    at least one active olefinic organic cpd. (preferably those of the
    formmula II (N: 2-4; R: di- tri- or tetravalent organic or inorganic
    residual group)) and epoxy type organic compounds (preferably, those of
    the formula III(n, R: the same as the formula II)) in an amount of 30
    wt. % (solid base) based on the gelatin. The compsn. used as an
    under-coating liquid has increased stability to ultraviolet radiation
    and the exhaust gas produced after drying does not generate poisonous
    gases upon burning.
Derwent Class: A11; A23; A89; G06; P42; P83
International Patent Class (Additional): B05D-005/00; C08J-007/04;
  G03C-001/76
PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
?ds
Set
        Items
                Description
                (ALKYL(W)CELLULOSE? OR ALKYLCELLULOSE?) AND (PREPAR? OR PR-
S1
             EP OR MANUF? OR PRODUC?) AND (IRRAD? OR RADIAT? OR GAMMA(W) RA-
                RD (unique items)
           17
?s (alkyl(w)cellulose? or alkylcellulose?)(s)self(w)link?
Processing
Processed 10 of 15 files ...
Completed processing all files
          884549 ALKYL
          391700
                 CELLULOSE?
            1781 ALKYL (W) CELLULOSE?
             540 ALKYLCELLULOSE?
         1292540
                 SELF
         1986384 LINK?
                 (ALKYL(W)CELLULOSE? OR ALKYLCELLULOSE?)(S)SELF(W)LINK?
?s (alkyl(w)cellulose? or alkylcellulose?)(s) self(w)(cross(w)link? or crosslink?)
          884549 ALKYL
```

```
391700 CELLULOSE?
                 ALKYL (W) CELLULOSE?
            1781
             540 ALKYLCELLULOSE?
         1292540 SELF
         1881715 CROSS
         1986384 LINK?
          209431 CROSS(W) LINK?
          230191 CROSSLINK?
                 (ALKYL(W)CELLULOSE? OR ALKYLCELLULOSE?)(S)
      S4
                  SELF(W) (CROSS(W) LINK? OR CROSSLINK?)
>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 345.
>>>Duplicate detection is not supported for File 347.
>>>Duplicate detection is not supported for File 351.
>>>Records from unsupported files will be retained in the RD set.
...completed examining records
     S5
              4 RD (unique items)
2t5/7/1-4
          (Item 1 from file: 345)
 5/7/1
DIALOG(R) File 345: Inpadoc/Fam. & Legal Stat
(c) 2002 EPO. All rts. reserv.
16651429
No legal status available
          (Item 1 from file: 347)
 5/7/2
DIALOG(R) File 347: JAPIO
(c) 2002 JPO & JAPIO. All rts. reserv.
06775229
                      ALKYLCELLULOSE DERIVATIVE, AND ITS PRODUCTION
 SELF - CROSSLINKED
              2001-002703 [JP 2001002703 A]
PUB. NO.:
              January 09, 2001 (20010109)
PUBLISHED:
              YOSHII FUMIO
INVENTOR(s):
              KUME TAMIKAZU
              MURAKAMI TEI
APPLICANT(s): JAPAN ATOM ENERGY RES INST
              DAICEL CHEM IND LTD
              11-177517 [JP 99177517]
APPL. NO.:
              June 23, 1999 (19990623)
FILED:
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ABSTRACT

PROBLEM TO BE SOLVED: To obtain the subject derivative which has excellent biodegradability and further has excellent water absorbability, by irradiating a mixture comprising an alkylcellulose derivative and water with radiations.

SOLUTION: This method for producing a self - crosslinked alkylcellulose derivative comprises irradiating a mixture comprising (A) 100 pts.wt. of an alkylcellulose derivative as a raw material (the alkyl group has one to three carbon atoms and may be substituted by one or more hydroxyl groups, or the like) and (B) 5 to 2,000 pts.wt. of water with radiations. The component A is preferably a carboxyalkylcellulose, a hydroxyalkylcellulose, an alkylcellulose or their mixture, which has at least one hydroxyl group or carboxyl group per glucose unit. 20% or more of the total amount of the hydroxyl groups and carboxyl groups of the component A is especially

preferably their alkali metal salts, ammonium salts or amine salts. COPYRIGHT: (C) 2001, JPO (Item 1 from file: 351) DIALOG(R) File 351: Derwent WPI (c) 2002 Thomson Derwent. All rts. reserv. 013819299 WPI Acc No: 2001-303511/200132 alkyl cellulose derivative used Manufacture of self crosslinked as soil conditioner in agriculture, is obtained by irradiating gamma rays on mixture of alkyl cellulose derivative and water Patent Assignee: DAICEL CHEM IND LTD (DAIL); JAPAN ATOMIC ENERGY RES INST Number of Countries: 001 Number of Patents: 001 Patent Family: Week Kind Date Patent No Kind Date Applicat No 19990623 200132 B 20010109 JP 99177517 JP 2001002703 A Α Priority Applications (No Type Date): JP 99177517 A 19990623 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes JP 2001002703 A 9 C08B-015/10 Abstract (Basic): JP 2001002703 A NOVELTY - Self - crosslinked alkyl cellulose derivative is obtained by irradiating gamma-rays on a mixture containing 100 weight parts (wt.pts) of 1-3C alkyl cellulose derivative as raw material and 5-2000 wt.pts of water. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for self - crosslinked alkyl cellulose derivative. USE - As a ground modifier in engineering works, soil conditioner in agriculture and horticultural field, water retention agent, coating agent, adhesive, poultice and soft ice cream. ADVANTAGE - Self - crosslinked type alkyl cellulose derivative is an excellent water absorbent and has self biodegrading ability. pp; 9 DwgNo 0/6 Derwent Class: A11; A82; A97; C04; D14; D22; F09; G02 International Patent Class (Main): C08B-015/10 International Patent Class (Additional): C08J-003/24; C08J-003/28; C08L-001-08; C09D-101/28; C09D-101/32; C09J-101/28; C09J-101/32 (Item 2 from file: 351) DIALOG(R) File 351: Derwent WPI (c) 2002 Thomson Derwent. All rts. reserv. 009635920 WPI Acc No: 1993-329469/199342 Water-swellable, water-insol. modified polysaccharide - obtd. by forming a mixt. of water-soluble modified polysaccharide, water and a crosslinking agent, recovering the polysaccharide and heat treating the prod. Patent Assignee: KIMBERLY CLARK CORP (KIMB); KIMBERLY-CLARK WORLDWIDE INC (KIMB); KIMBERLY-CLARK CORP (KIMB) Inventor: QIN J Number of Countries: 013 Number of Patents: 014 Patent Family:

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Priority Applications (No Type Date): US 92870529 A 19920417
Cited Patents: 2.Jnl.Ref; GB 1086323; JP 4120142; JP 56084701; JP 4120142
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Abstract (Basic): EP 566118 A

Method comprises: forming a mixt. comprising a water-soluble modified polysaccharide, water and a cross-linking agent; recovering the modified polysaccharide from the mixt.; and heat treating the prod. at above 80 deg.C to crosslink and render it water insol. Also claimed is the polysaccharide produced.

Pref. the modified polysaccharide is selected from a carboxylated, sulphonated, sulphated or phosphated derivs. of polysaccharides and/or cellulose, mor esp. carboxymethyl their salts (esp. carboxyalkyl cellulose). The crosslinking agent is an organic cpd. comprising at least two functional gps. capable of reacting with a carboxyl or hydroxyl gp. of a polysaccharide (esp. diamines, polyamines, diols and/or polyols, more esp. chitosan glutamate, type of gelatin, diethylenetriamine, ethylene glycol, butylene glycol, polyvinyl alcohol, hyaluronic acid, polyethylene imine and/or their derivs.. The recovered modified polysaccharide is heat-treated to cause cross-linking or the crosslinking involves self - crosslinking through esterification. When the crosslinking agent is a diamine or polyamine, the recovered modified polysaccharide is heat-treated to

cause crosslinking formed by esterification and amidation.

USE/ADVANTAGE - The polysaccharide produced has good absorption properties similar to the synthetic highly absorptive materials and is suitable for use in personal care absorbent prods. such as diapers, training pants and feminine care prods..

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Abstract (Equivalent): EP 566118 B

A method for producing a water-swellable, water-insoluble modified polysaccharide, the method comprises: (i) forming a mixture comprising a water-soluble modified polysaccharide, water and a crosslinking agent, where the water-soluble modified polysaccharide dissolves into the water, and where the modified polysaccharide is selected from carboxylated, sulphonated, sulphated, and phosphated derivatives of polysaccharides, their salts, and mixtures of it; (ii) recovering the modified polysaccharide and the crosslinking agent from the mixture; and (iii) heat-treating the recovered modified polysaccharide and the crosslinking agent at a temperature above 80 deg. C for a time sufficient to crosslink the modified polysaccharide to render it water-swellable and water-insoluble, as well as to provide it with an Absorbency Under Load, as defined in the description and Figure 1, of at least 17, the water-swellable, water-insoluble modified polysaccharide retaining greater than 50 percent of its Absorbency Under Load after aging for 60 days at 24 deg. C and 30 percent relative humidity.

Dwg.0/3

Derwent Class: A11; A96; D22; F07; P32; P34

International Patent Class (Main): C08B-011/12; C08B-015/010; C08B-015/10; C08B-037/00

International Patent Class (Additional): A61F-013/53; A61L-015/28;
A61L-015/60; C07B-005/00; C07B-031/12; C07B-037/00; C08B-011/20;
C08B-015/00; C08L-001/26

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